

Title (en)
SAMPLE SUBSTRATE, LIQUID SAMPLE ANALYZING APPARATUS, AND METHOD FOR PREPARING LIQUID SAMPLES, IN PARTICULAR FOR A LC-MS ANALYSIS

Title (de)
PROBENSUBSTRAT, FLÜSSIGPROBENANALYSEVORRICHTUNG UND VERFAHREN ZUR ANALYSE VON FLÜSSIGPROBEN, INSBESONDERE FÜR EINE LC-MS-ANALYSE

Title (fr)
SUBSTRAT D'ÉCHANTILLON, APPAREIL D'ANALYSE D'ÉCHANTILLON LIQUIDE ET PROCÉDÉ DE RÉPARATION D'ÉCHANTILLONS LIQUIDES, EN PARTICULIER POUR UNE ANALYSE LC-MS

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Abstract (en)
A sample substrate 100, being adapted for preparing samples for an LC-MS analysis, comprises a reaction substrate device 10, 20 having a plurality of vessels 12, 22, each having at least one accommodating space being configured for accommodating a liquid sample and a vessel coupling section 15 with a vessel opening 13, and a plurality of collection cartridges 40, each having a cartridge coupling section 42 with a cartridge opening 43 and being configured for accommodating the liquid sample from one of the vessels 12, 22. Each vessel coupling section 15 is matched to each cartridge coupling section 42 with form-fitting so that they are adapted for coupling the reaction substrate device 10, 20 and the plurality of collection cartridges 40, thereby providing direct liquid communication of the vessels 12 and the collection cartridges 40 via the openings 13, 43 thereof. Furthermore, a liquid sample analyzing apparatus comprising the sample substrate 100 and a method of executing an LC-MS sample analysis, wherein the sample substrate 100 and an LC-MS apparatus are employed, are described.

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Citation (applicant)

- EP 3964290 A1 20220309 - SCIENION GMBH [DE]
- H. SPECHT ET AL., SINGLE-CELL MASS-SPECTROMETRY QUANTIFIES THE EMERGENCE OF MACROPHAGE HETEROGENEITY, Retrieved from the Internet <URL:http://dx.doi.org/10.1101/665307>
- Y. ZHU ET AL.: "Nanodroplet processing platform for deep and quantitative proteome profiling of 10-100 mammalian cells", NATURE COMMUNICATIONS, vol. 9, 2018, pages 882, XP055611613, DOI: 10.1038/s41467-018-03367-w
- Z. Y. LI: "Nanoliter-Scale Oil-Air-Droplet Chip-Based Single Cell Proteomic Analysis", ANAL. CHEM., vol. 90, 2018, pages 5430 - 5438, XP002801448

Citation (search report)

- [XII] WO 2020225420 A1 20201112 - SCIENION AG [DE]
- [XII] EP 3261762 A1 20180103 - MASTAPLEX LTD [NZ]
- [X] US 2018326421 A1 20181115 - MARTÍNEZ MENÉNDEZ FERNANDO [DE], et al

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